

Information Services

Mark Andrasik, Director

Leawood, Ks



Date: 1/8/2013

**To: Honorable Mayor Peggy Dunn, City Council,
Scott Lambers – City Administrator**

Re: Items Accomplished for 2012

In keeping with past practice, I've prepared a yearly update regarding our department – Information Services.

EXECUTIVE SUMMARY

Usually I characterize a year by saying it's a year of "preparation" or "infrastructure". For 2012, I'm not sure how to really characterize it other than to say we've worked on many projects none of which are more important than the new Justice Center. The type, size, and scope of the technology that we've prepared to apply at the Justice Center are extensive. This technology will be the foundation of our day-to-day operations, the heart of what will be rolled out to other facilities, and the jumping off point for future initiatives. This new infrastructure will be nimble allowing us to be fluid to the business of the day and to incorporate newer technology more quickly.

Here is a brief description of some of the major items we've accomplished this year.

- Preparation for Justice Center
- Panasonic Laptops, In-Car Video (Arbitrator) & Rocket Wireless
- New Radio System
- CitePay Court Web Payments
- iPad's & Related Devices
- Video Systems for Conference Rooms

One thing you learn by being in the field for a long time is that technology is ever changing. Technology turns over quickly, but certain truths persist. Security, reliable communication, and stable, consistent technologies are critical to successful organizations. Having a dedicated staff of Karl Weinfurter, Jack Reece, and Mike Blankenship makes these things possible. Thanks guys for all of your hard work – it makes a difference. Information Services will remain diligent in our responsibilities and enthusiastic about new opportunities as we head into 2013.



DETAIL

In this area I will highlight and detail specific items we accomplished.

New Justice Center – The new Justice Center that will house the Police, Legal, Court, and Information Services departments has required much planning and preparation. We are actually in the final detailed planning stages to the extent where we've determined makes, models, even down to the product numbers. All will be sent out for bid in the coming months. Here are a few of the technologies/projects:

Fiber Ring – there will be a 144 count fiber ring that will run from City Hall to the Justice Center and Overland Park & Johnson County and in a diverse path back to City Hall. What does the fiber ring connect and why is it important?

Leawood - This allows the City of Leawood to have one main data center in a hardened and secured facility at the Justice Center. With one main data center and high speed fiber connectivity between City Hall and the Justice Center we only need to purchase one set of technologies - not two, one for City Hall and one for the Justice Center. This high fiber count will be the basis for connecting other facilities, phone systems, traffic signals, trail cameras, and building security.

Overland Park - A high speed connection to Overland Park and the County are paramount. We connect to Overland Park for our Integraph Police System which is our computer aided dispatch and records management for the police department. Cad, I-Leads, & I-Mobile are specific applications that will benefit directly from increase speed and bandwidth. Opportunities will open up with this high speed connectivity to Overland Park including shared traffic signal video used by Public Works and our Police Investigations.

Johnson County – Connectivity required for the City/County's Motorola P25 radio system, NICE 911 recorder system and high speed connectivity for the County's GIS System. With the fiber connection we'll be setup to use the Johnson County Emergency Communications Center for our disaster recovery and offsite storage.

Coordination with Overland Park & Johnson County was integral to the design and construction of this project. As a result, there will be cost sharing on this project with Johnson County – the County will pay the cost associated with connecting the Library. The fiber ring creates a redundant path for voice, data, video, radio, and other technologies. The speed and capacity of fiber along with the sheer fiber count will allow for growth well into the future. We will see a monthly cost savings once this is implemented due to a reduction in the number of leased data and communication lines we currently use.

New Data Center – In the Justice Center we will have a new data center in a secured and hardened facility. This data center will contain our voice & data systems, switches, routers, centrally managed wireless system, video servers, storage area network (SAN), networking equipment, 911 and radio equipment, building security systems, ip video systems, etc. This is the brains and nerve center of our City’s technology. This may be a small paragraph of information but the quantity of work this requires has consumed many, many hours and required numerous meetings. The technology we apply to this data center will be the foundation for Leawood for a number of years to come.

IP Phone System (Cisco Business Edition 6000) – This will replace our existing 19 year old Police Department phone system. Communications need to be stable and secure. This platform integrates well with our existing Microsoft Exchange platform “Cisco Business Edition 6000 is designed for organizations with up to 1000 employees. The solution offers premium voice, video, mobility; messaging, presence and contact center features on a single platform and provides core communication capabilities medium-sized businesses need for improved collaboration. Enabled by virtualization technology, Cisco Business Edition 6000 consolidates multiple applications on single platform and therefore allows medium business to reduce their lower total cost of ownership and improve productivity of their employees. The high availability features supported by the solution make Cisco Business Edition 6000 ideally suited for companies that require mission critical voice, messaging....” This solution can be rolled out to City Hall for a much smaller incremental cost – we only need to purchase phone devices.

R56 Grounding - Grounding for our communication and networking equipment at the Justice Center is paramount. Motorola has a standard called R-56 which is a stringent industry standard for newly constructed facilities that contain expensive communications equipment. The City has a substantial investment in radio, networking, computing, video, and communications equipment that will be installed in the Justice Center and meeting this standard will help best protect this investment from lightning strikes. There will be a copper grounding ring and three grounding wells. Ten foot (10’) grounding rods will be buried where the tops of the rods will be at a minimum of 30” below grade. The building grounding system and lightning grounding will be tied together to provide one path for resistance. This R-56 standard was applied as well to the Johnson County Emergency Communications Center.

Wireless Technology - In the Justice Center we will be implementing a managed and secured wireless system from Cisco. This system will allow private (city business) wireless access as well as public wireless access. The two functions will operate over the same infrastructure but be completely segmented from each other. This wireless technology enables greater mobility no longer being tethered to your desk or specific office. iPads, tablets, and mobile devices of all sorts will now be integrated directly into our network. This is another block to our technical

foundation that will serve us well into the future with the same ability to be expanded to City hall at an incrementally lower cost. We would only need to purchase the wireless access points.

Audio & Video Systems - initially three rooms will be configured with turnkey audio and video systems and they are as follows: Municipal Court, Police Training Facility, & Emergency Operating Center. These rooms will have various video and audio equipment required to suit the functionality of the room. For instance, the municipal court room will have computer, television, DVD, inputs that can be controlled centrally by the Judge. This allows all users to view a traffic stop and the video / audio from it. All of this can be controlled by a wireless iPad. Other rooms within the Justice Center that may have audio & video systems in the future have been outfitted with the necessary infrastructure. This means we've installed the necessary conduit and floor boxes to cover most scenarios for future audio & video systems.

All of these technologies help us achieve high computing performance & connectivity, integrated systems with increased communication & capability, virtualization which results in less overall power consumption for both electrical and cooling (reducing our carbon footprint), higher security for both physical premises and networks, disaster recovery and business continuity, and mobility.

Police In-Car Video, Laptop, & Wireless System – A major initiative that we started back in late 2010 has been completed. A new technology design for mobile broadband connectivity and integrated video was implemented in our patrol vehicles earlier this year. It was prompted by the discontinuance of an older technology infrastructure provided by the Johnson Co. Sheriff's Dept. and by the need for faster and more reliable mobile data communications.

After evaluating several systems it was decided by a committee of officers and IT staff to replace our existing video units with the Panasonic Arbitrator 360 system. Part of the reason for this was that the Arbitrator system had the capability of uploading video to our server wirelessly. It was recommended by our Arbitrator supplier to integrate it with the "Rocket" system which is a mobile broadband router. This system allows us to not only upload at a much greater speed than a normal device via Wi-Fi but would automatically switch from Wi-Fi at the police station to mobile broadband in the field. Ultimately it provides connectivity to our CAD system and dispatchers via Intergraph along with other officers throughout the county, and the internet which is used to provide officers access to their city email, the city webpage and the ability to complete reports in the field. Once in the new justice center it will be possible to view these videos online as soon as they're uploaded.

Radio - The City has converted its complete city owned radio system, which includes all departments using 2 way radios, from an Ericsson EDACS system to Johnson County's Motorola P25 trunking. P25 is the new standard for communications in the Emergency Services field. There are many advantages to this system but primarily it will allow all agencies that have adopted it to communicate between each other which virtually eliminates the problem of interoperability. Locally our Police Dept. will not only be able to communicate with all the other agencies on the Johnson Co. system over its 9 repeater sites but eventually will be able to share radio resources on other separate systems such as Kansas City and Independence, Mo. A couple other benefits are a drastically increased coverage area and encryption of audio over some of the channels.

CitePay Court Payment System – In a coordinated effort between Municipal Court and I.T. we've completed the initial phase of receiving court payments via the internet using a PCI (Payment Card Industry) compliant company – CitePay. When those desiring to pay for their tickets on-line access our website they click on a link that takes them to CitePay's website specific to the City of Leawood. They enter violation information and then are presented the opportunity to pay on-line. If completed the payment transaction is posted back to the City of Leawood's court database. This integration eliminates many steps that were previously required by our Court staff, improving efficiency and overall security.

Kansas
JUDICIAL BRANCH

5 Easy Steps for Online Payment.

- 1. Find Your Information:** Enter your citation or case number and your birth date to find your financial obligations with the court.
- 2. Choose What to Pay:** Select the items you wish to pay.
- 3. Confirm Your Information:** Confirm the items you wish to pay and select your payment method (i.e. Credit/Debit Card).
- 4. Make Your Payment:** Enter your payment information on our secure site.
- 5. Print Your Receipt:** Print your payment receipt for your records.

START HERE

You have been forwarded to CitePayUSA from the **Leawood Municipal Court**. To begin, please click **Make a Payment**.

Make a Payment

SECURITYMETRICS
Certified

Pay with VISA, MasterCard or Discover




Paying Your Kansas Court Obligations is Fast, Easy and Secure.

Fast: Fines and fees are paid in minutes. No envelopes, no stamps, no trips to the court, no hassles.

Easy: Pay online anytime and anywhere you have internet access. Just 5 easy steps!

Secure: Same high level security used by online banking and financial sites.

Powered By **CitePayUSA**
© CitePayUSA. All rights reserved

[About CitePayUSA](#) [Security](#) [Terms and Conditions / Legal](#) [How It Works](#) [FAQ](#) [Contact Us](#)



powered by **VeriSign**
ABOUT SSL CERTIFICATES

IPads & Related Devices – What are we doing? –

Fire Department – we have purchased five (5) iPads for the Fire Department for use with FireHouse Inspector software. Firehouse Software is our main records management software for the Fire Department. The Fire Marshall as well as specific fire employees do yearly fire inspections of businesses. The FH Inspector software leverages the intuitive nature of the iPad and the “cloud” to capture information in the field and integrate it with our enterprise fire data back at the station. These iPads are currently using AT&T’s 3G network. At this point the Fire Department has embraced the technology provided by the iPad but still feels the FH Inspector application needs some refinement.

Police Department – we have purchased two (2) iPads for the Police department. These are the latest versions of the iPad with Verizon 4G LTE. These devices with 4G LTE are very fast with excellent coverage. This is a huge improvement. Connectivity to the internet, downloading information and applications, all have improved speed. The Police department is using these iPads to help investigate crime, solve cases, run sting operations, etc. I have asked the employees using these devices to use them to the fullest, install apps that will benefit their job, and report to us what they find – both positive and negative.

Information Services – here in I.T. we have two (2) iPads used for multiple purposes. Most of the time we use the iPad’s for remote access to our network, email, documentation, demonstration, and learning. One of the devices is used primarily by me for remote access. I can access our systems via my home wireless network and troubleshoot and solve issues remotely. The other iPad we use extensively at the office for learning. This device has become our lab “rat”...

Mobile Device Management – Mobile Device Management (MDM) has been implemented and is provided by AirWatch. “AirWatch’s Mobile Device Management (MDM) solution enables you to manage large-scale deployments of mobile devices. Our solution provides the ability to quickly enroll devices in your enterprise environment, configure and update device settings over-the-air, enforce security policies and compliance, secure mobile access to corporate resources, and remotely lock and wipe managed devices. With AirWatch, you can manage a diverse fleet of Android, Apple, BlackBerry, Mac OS X, Symbian, and Windows devices in a single console.” MDM is capable of granular control of mobile devices. Many levels of device wiping can be implemented, remote installation of applications, restricting certain applications from being installed or deleted; applying policies centrally instead of individually, all are functions MDM provides. If a users loses their device we can quickly wipe the device. Security of our information, data protection and confidentiality, are enhanced with Mobile Device Management.

Microsoft Surface – [This is a new tablet device from Microsoft](#). We were very curious to get our hands on one of these devices because of the “enterprise” nature of Microsoft. Apple iPads are very intuitive and easy to use but are more “consumer” and less “enterprise” oriented. The wealth of applications that the iPad has available is a major benefit to the iPad. The typing functionality of the Surface is easier, yet because of the lack of applications we tend to use the iPad. Also, the Surface doesn’t have a built in cellular card. Granted you can use an external cellular card but the integrated aspect of the iPad is more appealing. We are continuing to research these. Dell has a [XPS 12 Ultrabook](#) that shows much promise as well.

Dept. Heads – We’ve purchased three (3) additional iPads for Patty, John, & one for Joe by way of Calvin Burgess. We are having them use the iPads to help determine future usage. We’ve asked them to try different applications, take photos & video, browse the internet, and use our Leawood Code and Council Packets with the Adobe Reader software. All in the hopes of truly determining what type of productivity can be realized by this technology.

Future – the technology that we anticipate applying to the new Justice Center will be the infrastructure needed to securely and thoughtfully deploy these types of devices. Along with the managed wireless infrastructure, network & computing power, fiber ring, at the new Justice Center, and the Mobile Device Management software already implemented we’ll be able to provide more device independence and mobility. I truly believe these devices are here to stay and we need to plan accordingly.

Conclusion – It’s easy to get enamored with new technology and the latest greatest stuff. I’ve fallen into this trap myself. But over time, with a few bumps and bruises as reminders, experience needs to prevail. We must apply this technology in a thoughtful and tested way. Please don’t be misled, this new technology, in my opinion, is here to stay and is extremely beneficial. I’m very excited about what this can provide to our City. Our focus, at this point in time, needs to be directed to the technology we are to apply at the Justice Center. Once complete we can direct greater attention to iPads, tablets, mobile applications, custom applications, etc., for we’ll have the required infrastructure in place.

Video Systems for Conference Rooms – Many of our conference rooms at City Hall, Public Works Maintenance, Fire, and Parks Maintenance have been upgraded with large screen monitors connected to computers and wireless keyboards and mice. Staff can use this equipment to train, review projects, display geographic information systems, Google Maps, etc. This provides easy access to this technology with the ability to share it with an audience.

❑ **Other Items**

- WebTrac & RecTrac – new servers & software
- Upgraded Major Software packages – Eden, FullCourt, GBA, Firehouse
- Upgraded Symantec
- 3 Year Technology Plan
- Wiki Documentation
- PRTG Enterprise
- SSL VPN
- Patch Management
- Virtualization of Servers
- Rebuilt Windows Update Server
- Rebuilt IPMON server
- Budget All Employee Salary & Benefits for 2012 & 2013
- NetMotion
- Year End Personnel Analysis (Wages & Benefits & Overtime)
- Crystal Reports
- Total Compensation, Workers Comp, Reports for Human Resources
- Full Parcel Imports from Johnson County
- Recycled Computers
- Server, Desktop & Laptop Replacements

We continually strive to improve our systems, secure our network, enhance our capabilities, while maintaining our existing investment. We are excited about our future as we head into 2013, we look forward to the fruition of a lot of work and effort related to the new Justice Center, and we are thankful for the support and opportunities to serve the Mayor, Governing Body, City Administrator, and Citizens of Leawood. Please contact me if you have any questions.

Sincerely,

Mark Andrasik

Director of Information Services

City of Leawood, Kansas

(913) 339-6700 ext. 125